PATENT
Docket No.: PIPE-001

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph 47 as follows:

[0047] Referring now to FIG. 1B, a graph of voltage vs. time of both a single cycle of a sinewave carrier modulated according to the techniques of the present invention and of exemplary data detected from that carrier is presented. In the upper trace, a single cycle of a sinewave carrier is shown modulated with four bits per half cycle. In the ~~upper trace~~lower trace, a representation is shown of the voltage that would be detected from that carrier using the techniques of the present invention. The absence of encoded data in the region symmetrical about 90° is noted.

Please amend paragraph 60 as follows:

[0060] The 9-bit count output from counter 22 is also provided to the 9 least significant bits of non-volatile memory 32, which then has one location corresponding to each discrete phase angle into which the sinusoidal carrier is resolved. In the circuit of FIG. 3, memory locations in non-volatile memory 32 corresponding to phase angles in the ranges $[\theta_1 + \Delta\theta]$, $[\theta_2 + \Delta\theta]$, $[\theta_3 + \Delta\theta]$, and $[\theta_4 + \Delta\theta]$ contain the value "1" and memory locations in non-volatile memory ~~30~~32 corresponding to phase angles outside of these ranges contain the value "0".

Please amend paragraph 77 as follows:

[0077] A controller 62 provides the supervision and control of the system. Data buffer 64 stores the data that comes in from its source. The input data is clocked in from the outside source. It could be serial or parallel in format. The data buffer 64 under the supervision of the controller 62 outputs a specific data bit just at the right time for the assertion (if a one) or de-assertion (if the bit is a zero) of a elemental phase change as described above.

Please amend paragraph 117 as follows:

[0117] Referring now to FIG. 15, a block diagram illustrates how a communications system according to the present invention can be used in conjunction with an existing modem protocol. While FIG. 15 shows such a system 220 using V.90 modem protocol, persons of ordinary skill in the art examining ~~Fl.~~FIG. 15 and the accompanying disclosure will appreciate that other modem protocols could be integrated into the present invention.